



TO: State Energy Conservation Office (SECO)

FROM: Bluebonnet Electric Cooperative

RE: SB-924 Energy Efficiency Report

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Cooperative Energy Efficiency Goals:

Through the cooperative's Sustainable Grid initiative, an emphasis has been placed on engaging our membership to participate in active conservation and new technologies that have been implemented. The Net Energy Market web portal allows our membership to actively manage their account, and see all the information that the cooperative has concerning their electric usage. All members with online accounts can view their hourly usage and costs daily. The information included shows both daily and hourly usage data, that the member can then use to audit their behavior and become more efficient with how and when they are using energy. Currently, around 25,732 of the cooperative's members have signed up and are actively participating in the portal.

In mid-2012, Bluebonnet Electric added a new communication avenue for its members to better understand their usage by unveiling its mobile app for the iPhone and Android platforms. The mobile app allows members to track their hourly usage and cost from their smartphone, as well as engage in conservation tips that increase the 9,605 participating member's knowledge and capability.

In 2013, 172 Bluebonnet members actively participate in the cooperative's pilot project with Consort. These members have Advanced Metering Infrastructure (AMI) meters, new thermostats, and relay switches on their HVAC unit(s) and water heaters installed in their homes. The pilot, through the installed equipment, allows the member to establish comfort settings in their home through the programs website. All of the installed equipment communicates wirelessly with the meter through the thermostat, and additionally allows the cooperative to run load curtailment events that are monitored through the utility's electric operations grid control center. Members can set a limitless amount of personalized settings for their home, and once notified that the utility will need to run an event, can opt-out anytime either through the aforementioned settings, manually at the thermostat by raising or lowering the temperature, or by contacting Bluebonnet's member services department. Participants in the pilot have seen reduced usage and therefore lower costs.

As part of the cooperative's employee performance incentive plan, Bluebonnet tracks and reports monthly on its own set of energy conservation goals. If levels of these goals are achieved, the employees can potentially see that directly reflected in their annual pay bonus. A spreadsheet of what is tracked is attached to this filing. Additionally, concerning its own conservation goals, Bluebonnet retires wind Renewable Energy Credits (RECs) to cover the usage of its own facilities. In total, 6,505 RECs were voluntarily retired, and 136 members took advantage of our

green rate program that allows them to designate their preference to receive electricity from a renewable source.

In 2013 Bluebonnet experienced a healthy growth of our Distributed Generation tariff class with a growth of 46% in solar and 6% in wind.

Also in October of 2012 Bluebonnet opened its Eco Home to the public. The 1,284-square-foot house on Bluebonnet's 21-acre Brenham service-center campus hosts builders, those in the construction trade, school children, college students, homeowners, realtors and Bluebonnet members who want to learn more about creating an energy-saving home and enjoy a unique learning experience.

The home is built with state-of-the-art energy-smart construction materials, a heat-reflecting roof, high-efficiency windows and other conservation features. A 45-foot-tall wind turbine can provide 2.4 kilowatts of energy. Five-kilowatt solar panels are closely monitored online to track the energy they produce and how it is used. Massive nearby rain cisterns store thousands of gallons of precious Texas rainwater. A two-ton geothermal system, with pipes that descend 250 feet underground, help heat the house in winter and cool it in summer.

In the home, visitors see the latest energy-smart technology, including home automation systems, low-flow plumbing and energy-smart appliances.

Since its beginning the tour has provided 160 tours of varying sizes (1 person to 403 people) and organizations.

In addition to the Eco Home's educational information, Bluebonnet's Distributed Generation tariff for electric service is currently being used by 64 of its members. These generation installations vary in capacity and are all under 10kW.



Bluebonnet Electric Facilities Energy Conservation  
2013



Weights	25%	25%	25%	25%	
	Fuel Usage	Mileage	Electric Usage	Printer Usage	Total %
Jan-13	-3%	-13%	15%	-34.98%	-9%
Feb-13	-4%	-14%	2%	-29.00%	-11%
Mar-13	-7%	-12%	5%	-21.88%	-9%
Apr-13	-3%	-14%	7%	-27.70%	-9%
May-13	-2%	-14%	6%	-21.96%	-8%
Jun-13	-3%	-13%	5%	-22.39%	-8%
Jul-13	-2%	-8%	2%	-20.14%	-7%
Aug-13	-4%	-6%	1%	-18.02%	-7%
Sep-13	-3%	-5%	1%	-16.66%	-6%
Oct-13	-4%	-4%	1%	-16.85%	-6%
Nov-13	-4%	-5%	2%	-16.51%	-6%
Dec-13	-4%	-2%	4%	-14.67%	-4%

2012 Total

Month	Year	BEC GAS	BEC DIESEL	WEX GAS	WEX DIESEL	Gallons
JAN	2012	15,759	3,400	3,379	2,113	24,652
FEB	2012	15,242	3,065	2,540	1,694	22,541
MAR	2012	17,764	3,712	2,479	2,098	26,053
APR	2012	15,020	3,779	3,040	2,212	24,051
MAY	2012	16,904	3,780	3,404	2,384	26,471
JUN	2012	16,500	4,122	3,319	2,386	26,326
JUL	2012	9,707	2,472	8,414	3,728	24,321
AUG	2012	12,642	5,434	8,414	3,728	30,217
SEPT	2012	13,344	6,023	3,586	373	23,326
OCT	2012	14,595	6,592	5,170	707	27,064
NOV	2012	11,434	5,673	3,296	320	20,722
DEC	2012	12,060	6,141	4,308	580	23,089

Reimbursed Mileage

Reimbursable Mileage

Month	Year	Monthly	Month	Year	Miles	YTD Differ	% diff from 2012
JAN	2012	24202	JAN	2013	21038	(3,164)	-13%
FEB	2012	24792	FEB	2013	21182	(6,774)	-14%
MAR	2012	26358	MAR	2013	23939	(9,193)	-12%
APR	2012	30155	APR	2013	24525	(14,823)	-14%
MAY	2012	27695	MAY	2013	24328	(18,190)	-14%
JUN	2012	23273	JUN	2013	21821	(19,642)	-13%
JUL	2012	29470	JUL	2013	34795	(14,317)	-8%
AUG	2012	25398	AUG	2013	26961	(12,754)	-6%
SEPT	2012	25638	SEPT	2013	25484	(12,908)	-5%
OCT	2012	28653	OCT	2013	29647	(11,914)	-4%
NOV	2012	20270	NOV	2013	18048	(14,136)	-5%
DEC	2012	6975	DEC	2013	13994	(7,117)	-2%

Energy Consumption

kWh Usage

Month	Year	kWh Usage	Month	Year	kWh Usage	YTD Difference	% diff from 2012
JAN	2012	252,299	JAN	2013	290,179	37,880	15.01%
FEB	2012	243,308	FEB	2013	213,386	7,958	1.61%
MAR	2012	220,310	MAR	2013	244,885	32,533	4.54%
APR	2012	213,246	APR	2013	243,592	62,879	6.77%
MAY	2012	233,819	MAY	2013	245,940	75,000	6.45%
JUN	2012	260,699	JUN	2013	255,058	69,359	4.87%
JUL	2012	284,423	JUL	2013	255,816	40,752	2.39%
AUG	2012	285,764	AUG	2013	258,421	13,409	0.67%
SEPT	2012	239,872	SEPT	2013	240,527	14,064	0.63%
OCT	2012	228,242	OCT	2013	242,342	28,164	1.14%
NOV	2012	217,733	NOV	2013	254,982	65,413	2.44%
DEC	2012	273,121	DEC	2013	324,759	117,051	3.96%

Printer Usage

Printer Usage

Month	Year	Printer Usage	Month	Year	Printer Usage	YTD Difference	% diff from 2012
JAN	2012	117,143	JAN	2013	76,165	(40,978)	-34.98%
FEB	2012	89,027	FEB	2013	70,220	(59,785)	-29.00%
MAR	2012	65,184	MAR	2013	65,598	(59,371)	-21.88%
APR	2012	124,542	APR	2013	74,244	(109,669)	-27.70%
MAY	2012	98,051	MAY	2013	99,250	(108,470)	-21.96%
JUN	2012	110,166	JUN	2013	83,357	(135,279)	-22.39%
JUL	2012	73,354	JUL	2013	72,224	(136,409)	-20.14%
AUG	2012	78,450	AUG	2013	78,621	(136,238)	-18.02%
SEPT	2012	71,325	SEPT	2013	69,742	(137,821)	-16.66%
OCT	2012	97,735	OCT	2013	79,695	(155,861)	-16.85%
NOV	2012	66,906	NOV	2013	58,976	(163,791)	-16.51%
DEC	2012	61,045	DEC	2013	70,349	(154,487)	-14.67%

2013 Total

Month	Year	BEC GAS	BEC DIESEL	WEX GAS	WEX DIESEL	Gallons	YTD Difference	Fuel Usage % diff from 2012
JAN	2013	13,010	6,777	3,615	402	23,804	(848)	-3.44%
FEB	2013	12,414	6,177	2,658	411	21,660	(1,729)	-3.66%
MAR	2013	13,596	6,265	2,488	454	22,803	(4,979)	-6.80%
APR	2013	15,247	8,114	2,621	477	26,459	(2,571)	-2.64%
MAY	2013	15,447	7,712	3,354	660	27,172	(1,870)	-1.51%
JUN	2013	13,143	7,365	2,424	571	23,503	(4,693)	-3.13%
JUL	2013	14,103	7,485	2,779	841	25,208	(3,806)	-2.18%
AUG	2013	13,871	8,381	2,407	888	25,546	(8,477)	-4.14%
SEPT	2013	13,246	7,511	2,606	1,396	24,760	(7,044)	-3.09%
OCT	2013	13,601	6,595	3,090	1,279	24,565	(9,543)	-3.74%
NOV	2013	11,057	5,831	2,370	781	20,039	(10,227)	-3.71%
DEC	2013	12,093	6,562	2,289	1,258	22,203	(11,113)	-3.72%